

background scenario the cost was 29,639.22€. In terms of total costs the background scenario had a lower cost on average until the year 2009. **CONCLUSIONS:** Early detection of breast cancer improves survival prognosis and decreases treatment costs for each detected cancer. In the future, the costs of the early detection program will be balanced by the savings in treatment costs.

PCN45

ESTIMATING THE BUDGET IMPLICATIONS OF RADIUM RA 223 DICHLORIDE IN CASTRATION-RESISTANT PROSTATE CANCER PATIENTS WITH NON-VISCERAL BONE METASTASES TREATED IN INFUSION CENTERS IN THE UNITED STATES

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OBJECTIVES: Metastatic prostate cancer (MPC) results from the spread of cancer to distant parts of the body and is associated with markedly decreased survival. First line therapy for prostate cancer involves androgen deprivation, however most MPC patients progress in spite of castration levels of testosterone. A recently approved infusion product, Radium Ra 223 dichloride (Radium-223), has been introduced in the U.S. market adding to concerns about the costs for end-stage treatments. We sought to estimate the budget impact of Radium-223 on infusion center expenses in the U.S. **METHODS:** We developed a financial model to estimate budget impact from a hospital-based infusion center perspective. Using data from the U.S. Census, SEER, and the Premier Perspective Database, we estimated the eligible population using a theoretical hospital's catchment area. We modeled use, treatment costs and reimbursement for three radiopharmaceuticals (Radium-223, Samarium-153, and Strontium-89) and two common chemotherapies (docetaxel and cabazitaxel) in terms of drug cost, infusions, and laboratory monitoring. Reimbursement for these treatments was estimated at both commercial and Medicare rates using the Average Sale Price and relevant Common Procedural Technology codes. We calculated total cost and reimbursement for one year with the current utilization from Premier and then estimated the incremental net budget impact associated with adoption of Radium-223 at 1, 3, and 5% of patients. **RESULTS:** In a catchment area of 1 million lives, an estimated 45 MPC patients with non-visceral bone metastases would be treated with current agents and incur approximately \$500,000 in treatment costs for radiopharmaceuticals and chemotherapy. Adding Radium-223 to the treatment mix and assuming adoption rates of 1% to 5%, the annual net impact on the infusion center budget would range from \$600 to \$3,000. **CONCLUSIONS:** Radium-223 presents a new treatment option for MPC patients with non-visceral bone metastases and a positive net impact for infusion centers.

PCN46

ESTIMATING THE BUDGET IMPACT OF ADDING AVASTIN (BEVACIZUMAB) TO FRONT LINE TREATMENT FOR ADVANCED OVARIAN CANCER IN BRAZILIAN SUPPLEMENTARY HEALTH CARE SYSTEM

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OBJECTIVES: Ovarian cancer (OC) is one of the most lethal gynecologic cancers worldwide. According to Brazilian Institute of Cancer (INCA), 6,190 new OC cases were estimated in 2012. During the last 15 years, carboplatin plus paclitaxel (CP) has been established as front-line (FL) standard of care therapy for advanced ovarian cancer, with no significant advances in treatment ever since. Bevacizumab (Bev) in combination with CP was approved in Brazil for FL treatment of advanced epithelial OC on May/2013. Therefore, this study aimed to estimate the economic impact of bevacizumab reimbursement for advanced OC in Brazilian Supplementary Healthcare System. **METHODS:** The potential number of eligible patients for CP + Bev in FL therapy for advanced OC was estimated following an epidemiologic approach. It was assumed that Supplementary Healthcare System attendance accounts for 40% of all patients. Additional drug costs and infusion fees were evaluated. The ex-factory price (VAT 18%) and labeled dose were considered. Average therapy duration of CP + bevacizumab was 15 months based on GOG-0218 trial. Costs were reported in Brazilian Reals (BRL1.00=USD0.44; Jun/2013). A total health assistance budget of BRL 88.1 billion was forecasted for 2013, based on the last updated data from Brazilian National Regulatory Agency for Private Health Insurance and Plans (ANS). **RESULTS:** A total of 1,287 eligible cases in CP + Bev FL therapy for advanced OC are expected in 2013 in the private setting. Adding bevacizumab to the treatment of all these potential patients would yield an increase of BRL 267 million, corresponding only to an increment around 0.30% on health assistance expenses. **CONCLUSIONS:** Treating all eligible FL advanced OC patients with CP + Bev will potentially result in a low impact in Supplementary Healthcare System budget, associated to unprecedented clinical benefits for this population with a high medical unmet need.

PCN47

THE FRENCH PUBLIC HEALTH CARE SYSTEM: AN ORIGINAL WAY FOR COST SAVING

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OBJECTIVES: The patent expiries of leading biologic products and development of biosimilars create opportunities for cost saving. The french public health policies has established a complementary means encouraging healthcare facilities (HF) to save money : the "écart médicament indemnisable" (EMI). We explored the evaluation of EMI on the erythropoietic factors class. **METHODS:** We've carried out a comparative study in french HF, representing about 65% of national hospital beds, on the price of erythropoietic factors. The data have been collected on procurement procedures operative as at January 1, 2012. **RESULTS:** A total of 25 care facilities or group of care facilities agreed to participate in the study. The overall sales turnover reached 15 millions euros (M€). All HF granted a discount from 5% to 69% on the

prices fixed by negotiation between the Comité Economique des Produits de Santé and the manufacturers. The average discount ranges from 11% to 73%. The average EMI varies between 1.42 and 2.69 € excluding value added tax (EVAT) per 1000 international units and between 0.09 and 0.22 € EVAT per microgram according to the medicinal product. The average amount refunded to HF can be estimated at January 1, 2012 at 3.37 M€, or 22.6% of the total budget. We assessed annual prices trends based on starting dates of contract, and we could figure out EMI trends. According to the product, the EMI quickly decline, remain broadly stable or increase. **CONCLUSIONS:** Many of top-selling biologics are due to lose patent protection over the next years. The emergence of competition in pharmaceutical market contributes to better control expenditure in our health system. The great potential for cost savings concerning erythropoietic factors in our study could be investigated in other class of medicinal products.

PCN48

BUDGET IMPACT ANALYSIS OF FENTANYL BUCCAL TABLET FOR THE TREATMENT OF CANCER BREAKTHROUGH PAIN

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OBJECTIVES: To assess the economic impact of Fentanyl Buccal Tablet for the management of breakthrough cancer pain (BTcP) in Spain. **METHODS:** A 4-year budget impact model was developed for the period 2012-2015 for patients with BTcP from the perspective of the Spanish National Health System. BTcP products included in this model were rapid onset opioids containing fentanyl products (buccal, sublingual, or nasal transmucosal). Prevalence data on cancer, BTcP, opioid use and number of BTcP episodes were obtained from literature. Input data on direct medical resources associated with opioid use and opioide-induced side effects (OISEs) were obtained by consulting experts in oncology from different Spanish hospitals. Resource utilisation included drugs, medical and emergency visits, other non-pharmacological treatments and the treatment of OISEs. Unit costs were obtained from literature and a 3% discount rate was applied to costs. Based on the unit costs for drugs and medical resources the annual BTcP treatment costs per patient associated with each product were determined, to estimate the overall budget impact based on the total treatment population and the percentage of drug utilisation associated with each product. **RESULTS:** Patients treated with oral opioids for BTcP was estimated at 23,291 in 2012 with an increase up to 23,413 in 2015. The average annual budget savings with an increase of Fentanyl Buccal Tablet, Fentanyl Sublingual Tablet and Intranasal Fentanyl Spray and a decrease of Oral Transmucosal Fentanyl Citrate, was estimated at €2.6 million over the next four years. **CONCLUSIONS:** The increase in the use of Fentanyl Buccal Tablet leads to overall savings in the budget impact for the Spanish NHS. Although the economic impact of BTcP treatment showed to increase over the next four years due to population growth the average annual cost per patient reduced with €29 by the increase in the use of Fentanyl Buccal Tablet.

PCN49

ECONOMIC IMPACT OF DENOSUMAB FOR SKELETAL RELATED EVENT PREVENTION IN PATIENTS WITH BREAST CANCER AND BONE METASTASIS FROM A UNITED STATE MANAGED CARE ORGANIZATION PERSPECTIVE

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OBJECTIVES: To evaluate clinical and economic impact of increasing denosumab use compared to zoledronic acid (ZA) in BrCa patients with BM to a MCO. **METHODS:** An economic model was developed to estimate clinical and economic impact to a 1-million-member US MCO of introducing denosumab as bone-targeting agent (BTA) for prevention of SREs in BrCa patients with BM. Total number of patients receiving BTA was estimated based on disease prevalence and treatment eligibility in this population. The real-world SRE rates in ZA-treated patients were derived from a large commercial database and used together with the trial-based treatment effect for denosumab versus ZA to estimate the denosumab SRE rate. Total number of SREs, total SRE management medical cost, BTA drug cost, and total cost were calculated. The impact of denosumab per-member-per-month (PMPM) at increasing utilization rates was assessed by comparing to a scenario without denosumab, i.e., all patients received ZA. Additionally, impact of annual increase in denosumab use was conducted. **RESULTS:** A total of 122 BrCa patients with BM received BTA. In the scenario where all eligible patients receiving ZA, an annual total number of SREs was 155. An annual denosumab use of 20%, 35% or 45% resulted in 4.5%, 7.9%, and 10.2% reduction in total SREs and 5.7%, 10.1%, and 12.9% reduction in medical costs of managing SREs, compared to all patients receiving ZA. The drug cost was partially offset by the reductions in the medical cost and the increase in total cost was minimal (2.4%-5.5%). The PMPM ranged \$0.008-\$0.017. Consecutive-year analysis showed \$0.004 increase in PMPM with 10% denosumab utilization increase. **CONCLUSIONS:** Due to superior efficacy of denosumab versus ZA in SRE prevention in BrCa patients with BM, increased denosumab use results in medical cost reduction in a US MCO. Overall, denosumab provides additional clinical value with limited budget impact.

PCN50

POTENTIAL LONG-TERM COST SAVINGS DUE TO SIGNIFICANT CLINICAL BENEFIT OF OBINUTUZUMAB (GA101) IN COMBINATION WITH CHLORAMBUCIL IN PREVIOUSLY UNTREATED CHRONIC LYMPHOBLASTIC LEUKEMIA

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OBJECTIVES: Obinutuzumab is the first, glycoengineered type II antibody demonstrating increased Antibody-Dependent Cell-Mediated Cytotoxicity (ADCC) and